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WATER SUPPLY OUTLOOK FOR NEVADA



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

NEVADA DEPARTMENT of CONSERVATION
and NATURAL RESOURCES
DIVISION of WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAR. 1, 1978

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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ALL AVERAGES ARE FOR 1958-72 PERIOD

WATER SUPPLY OUTLOOK FOR NEVADA

PROSPECTS OF AN EXCELLENT WATER SUPPLY THIS SEASON CONTINUE TO IMPROVE. MARCH 1 SNOW SURVEYS INDICATE SNOWPACKS RANGING FROM 130 PERCENT IN THE TAHOE BASIN TO 155 PERCENT IN THE WALKER RIVER BASIN. THE HUMBOLDT AND SNAKE RIVER BASINS ARE 120 PERCENT, SUBSTANTIALLY ABOVE LAST MONTH'S FIGURE. OTHER AREAS IN THE STATE ARE ABOVE AVERAGE.

FEBRUARY 1 STREAMFLOW FORECASTS FOR THIS SEASON HAVE BEEN INCREASED BECAUSE OF ABOVE AVERAGE SNOWPACK THIS MONTH.

RESERVOIR STORAGE IN SEVEN MAJOR RESERVOIRS IMPROVED BY ONLY 81,000 ACRE- FEET DURING THE MONTH. RESERVOIR STORAGE, HOWEVER, IS STILL ONLY 36 PERCENT OF AVERAGE. LAKE TAHOE WATER LEVEL IS NOW AT 6,223.57 FEET OR 0.57 FEET ABOVE THE RIM ELEVATION FOR 69,000 ACRE- FEET OF USEABLE WATER.

East Slope Sierra Nevada

The outlook for an excellent water supply this season continues to improve. The snowpacks' water content had above average increases during the month. Most of it occurred during the first 15 days of the month. The last half of the month was dominated by sunny, mild weather.

Snowpacks are now 130 percent of the March 1 average on the Tahoe Basin, 140 percent on the Truckee, 141 percent on the Carson and 155 percent on the Walker Basin. All snowpacks are above the average for April 1.

Streamflow forecasts increased over last month. The Lake Tahoe Rise is forecast at 1.85 feet for April 1 to high, assuming gates closed. The Truckee River at Farad is forecast at 380,000 acre-feet for March 1 to July 31. The East Fork of the Carson is forecast to flow 285,000 acre-feet during March 1 to July 31 or 144 percent of average. The Carson River near Carson City is forecast at 147 percent. The West Walker River is forecast at 152 percent or 230,000 acre-feet while the East Walker is forecast at 130,000 acre-feet for the March 1 to August 31 period.

Reservoir storage improved only slightly during the month. Lahontan had the largest increase with 36,000 acre-feet for a month-end total of 114,000 acre-feet or 56 percent. Lake Tahoe has 69,000 acre-feet of useable contents. This compares to last year's 165,000 acre-feet and the average of 443,000 acre-feet. This is 0.57 feet above the rim elevation of 6,223.0 feet. Topaz and Bridgeport reservoirs are near average for this time of year with 11,000 and 13,000 acre-feet respectively.

It appears the reservoir storage will not be improved by next October 1 in Tahoe and Truckee drainages as most of the season's requirements will use all that is forecast.

Humboldt River

Snowpacks had large increases during the month and now are 120 percent of average. The low elevation snow courses show water contents of 200 to 300 percent of average and the snow cover is extensive.

Streamflow forecasts increased over last month. The northern tributaries have higher forecasts than the mainstem and southern tributaries. The Humboldt River at Palisades is now forecast for March 1 to July 31 at 230,000 acre-feet or 106 percent of average. Tributaries range from 120 to 142 percent on the north and 100 to 110 percent on the south.

Reservoir storage at Rye Patch is 49,000 acre-feet for 28 percent of the 1958-72 average and 45 percent of last year or an increase of 3,000 acre-feet for the month.

Snake River

The Owyhee and Snake River drainages have snowpacks of 120 percent. Streamflow forecasts range from 111 percent on Salmon Falls Creek to 130 percent on the Owyhee River near Gold Creek.

Wildhorse Reservoir contains 23,000 acre-feet as compared to last year's 45,000 acre-feet.

Northern Great Basin

Snowpacks are above average in this area. Snow courses and aerial markers east of the Surprise Valley area indicate water contents ranging from 190 to 220 percent of average. The Warner Mountains have snowpacks near average and streams in this area are forecast near average.

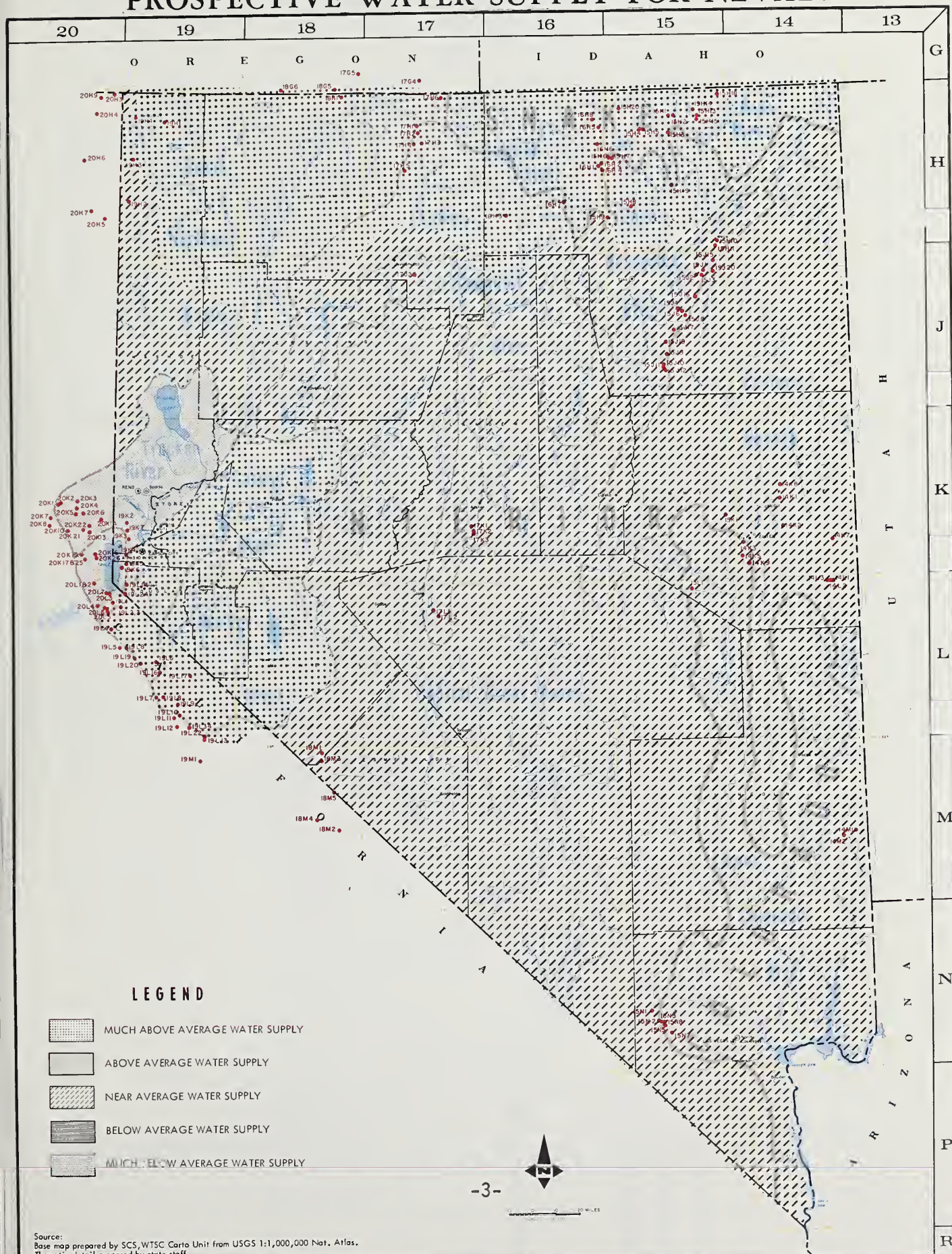
Eastern and Central Nevada

Snow surveys and aerial markers in these areas indicate average to above average snowpacks. Storms passing through this month have improved conditions considerably. Montgomery Pass snow course has 5.1 inches of water as compared to an average 1.3 inches.

Lower Colorado

Snow courses in the Caliente area are below average as most precipitation has been rain. However, the Mount Charleston area has snowpacks of 200 to 250 percent and the largest since 1969. Lee Canyon #2 snow course has 73 inches snow depth containing 21.9 inches of water. Average water content is 9.0 inches.

PROSPECTIVE WATER SUPPLY FOR NEVADA



INDEX TO NEVADA SNOW COURSES

(By Basins)

Refer to the map on the preceeding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
SNAKE RIVER BASIN					
SNAKE RIVER					
15H15MA	Bear Creek	31	46N	58E	7800
15H2	Fox Creek	33	46N	58E	6800
15H135A	Goat Creek	31	46N	60E	8800
15H15A	Hummingbird Springs	6	45N	60E	8945
15H20a	Merritt Mountain	10	46N	54E	7000
15H145A	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	Red Point	15	47N	61E	7940
15H35A	76 Creek	6	44N	58E	7100
15H19a	Stag Mountain	32	41N	58E	7800

OWYHEE RIVER					
15H45M	Big Bend	30	45N	56E	6700
16H6a	Columbia Basin	31	44N	53E	6650
16H8a	Fawn Creek	2	45N	52E	7000
15H5	Gold Creek	32	45N	56E	6600
16H1M	Jack Creek, Lower	18	42N	53E	6800
16H25AM	Jack Creek, Upper	9	42N	53E	7250
16H45	Jacks Peak	21	42N	53E	8420
16H55	Laurel Draw	20	45N	53E	6700
1764a	Louse Canyon (OR)	27	40S	44E	6440
15H9MP	Taylor Canyon	35	39N	53E	6200

INTERIOR

UPPER HUMBOLDT RIVER					
15J17a	American Beauty	32	31N	58E	7800
15J125A	Corral Canyon	27	28N	57E	8500
15J15M	Oorsey Basin	28	35N	60E	8100
15J3	Ory Creek	5	34N	60E	6500
15H7	Fry Canyon	31	43N	54E	6700
15J95M	Green Mountain	23	29N	57E	8000
15J10	Harrison Pass #1	9	28N	57E	6600
15J11	Harrison Pass #2	16	28N	57E	7400
15J4	Lamaille #1	15	32N	58E	7100
15J65	Lamaille #3	24	32N	59E	7700
15J8P	Lamaille #5	31	32N	59E	8700
15J20	Pole Canyon #2	6	34N	61E	7700
15J16a	Robinson Lake	23	33N	59E	9200
15H6MP	Rodeo Flat	36	43N	53E	6800
15J2	Ryan Ranch	1	34N	59E	5800
15J19	Smith Creek	26	30N	57E	7600
15H8	Tremewan Ranch	9	39N	55E	5700
15H10P	Trout Creek, Lower	28	37N	61E	6900
15H11A	Trout Creek, Upper	4	36N	61E	8500

LOWER HUMBOLDT RIVER					
17K1	Big Creek Campground	10	17N	43E	6600
17K2	Big Creek Mine	23	17N	43E	7600
17K3	Big Creek, Upper	26	17N	43E	7800
17H2	Buckskin, Lower	25	45N	39E	6700
17H1	Buckskin, Upper	11	45N	39E	8200
17L1	Corral, Lower	12	11N	40E	7500
17L2	Corral, Upper	20	11N	41E	8000
17J2	Golconda #2	22	35N	39E	6000
17H4	Granite Peak	22	44N	39E	7800
17H5	Lamance Creek	13	42N	38E	6000
17H3	Martin Creek	13	44N	39E	6700
16H3AP	Midas	18	39N	46E	7200
16H7a	Toe Jam	29	40N	50E	7700

EASTERN NEVADA					
14L1	Baker #1	29	13N	69E	7950
14L2	Baker #2	30	13N	69E	8950
14L3	Baker #3	25	13N	68E	9250
14K25	Berry Creek	26	17N	65E	9100
14K1	Bird Creek	34	19N	65E	7500
14K9a	Defiance Mines	9	14N	63E	9200
15J15	Hole-in-Mountain	6	35N	61E	7900
14K8	Kalamazoo Creek	34	20N	65E	7400
14K3	Murray Summit	25	16N	62E	7250
15K1	Robinson Summit	34	18N	61E	7600
14K7	Silver Creek #2	30	16N	69E	8000
14K5	Ward Mountain #2	25	15N	62E	8900

CENTRAL GREAT BASIN					
18M2	Campito Mountain (CA)	19	5S	35E	10200
18M5a	Chiatovich Flat (CA)	32	2S	34E	10500
15N2	Clark Canyon	8	19S	56E	9000
18M1	Montgomery Pass	4	1N	33E	7100
18H3a	Pinchot Creek (CA)	28	1N	33E	9300
18M4a	Plute Pass (CA)	33	4S	33E	11700
15H1	Trough Springs	23	18S	55E	8500

NORTHERN GREAT BASIN					
19H1a	Bald Mountain	17	45N	21E	6270
20H5	Barber Creek (CA)	23	39N	16E	6500
20H6	Cedar Pass (CA)	12	43N	14E	7100
18G6a	Oeno Creek (OR)	14	41S	34E	6000
18H1	Oisaster Peak	8	47N	34E	6500
20H3a	Oismal Swamp (CA)	31	48N	17E	7000
20H7	Eagle Peak (CA)	35	40N	15E	7200
19H3	49 Mountain	7	42N	19E	6000
19H2	Hays Canyon	1	39N	18E	6400
19H4a	Little Bally Mountain	8	45N	19E	6000
20H9	Mt. Bidwell	6	47N	16E	7200
20H10	North Star	13	47N	16E	6200
17G5a	Oregon Canyon (OR)	9	40S	40E	7240
17H6a	Quinn Ridge	9	47N	41E	6300
20H4	Reservation Creek (CA)	12	46N	15E	5900
18G5a	Trout Creek (OR)	10	41S	38E	7800

LAKE TAHOE					
20L65	Echo Peak (CA)	35	12N	17E	7800
20L5	Echo Summit (CA)	6	11N	18E	7450
20L105	Fallen Leaf (CA)	36	13N	17E	6300
19L2	Freel Bench (CA)	36	12N	18E	7300
19K6	Glenbrook #2	13	14N	19E	6900
19L3M5	Hagans Meadow (CA)	36	12N	18E	8000
19L245	Heavenly Valley (CA)	1	12N	18E	8850
20L4	Lake Lucille (CA)	28	12N	17E	8200
19K4M5	Marlette Lake	18	15N	19E	8000
20L3	Richardsons #2 (CA)	6	12N	18E	6500
20L1	Rubicon #1 (CA)	6	13N	17E	8100
20L2	Rubicon #2 (CA)	6	13N	17E	7500
20K16	Tahoe City (CA)	6	15N	17E	6250
20K26	Tahoe City Alt. (CA)	7	15N	17E	6300
20K275	Tahoe City Cross (CA)	1	15N	16E	6750
19L1	Upper Truckee (CA)	21	12N	18E	6400
20K17M	Ward Creek (CA)	21	15N	16E	7000
20K255	Ward Creek #2 (CA)	21	15N	16E	6750

TRUCKEE RIVER					
20K14	Boca #2 (CA)	28	18N	17E	5900
20K22	Brookway Summit (CA)	3	17N	16E	7100
20K21	Donner Park #2 (CA)	18	17N	16E	6000
20K10	Donner Summit (CA)	25	17N	14E	6900
20K7*	Fordyce Lake (CA)	34	18N	13E	6500
20K8*	Furnace Flat (CA)	10	17N	13E	6700
20K4M5	Independence Camp (CA)	34	19N	15E	7000
20K35	Independence Creek (CA)	14	19N	15E	6500
20K55	Independence Lake (CA)	9	18N	15E	8450
19K3	Little Valley	17	16N	19E	6300
19K25	Mt. Rose	7	17N	19E	9000
19K7	Mt. Rose Ski Area	30	17N	19E	9000
20K6	Sage Hen Creek (CA)	7	18N	16E	6500
20K19	Squaw Valley #2 (CA)	6	15N	16E	7500
20K135	Truckee #2 (CA)	22	17N	16E	6400
20K2*	Webber Lake (CA)	29	19N	14E	7000
20K1*	Webber Peak (CA)	30	19N	14E	8000

CARSON RIVER					
19L5	Blue Lakes (CA)	30	9N	19E	8000
19L4	Carson Pass, Upper (CA)	22	10N	18E	8600
19K5	Clear Creek	6	14N	19E	7300
19L195	Ebbetts Pass (CA)	17	8N	20E	8700
19L16a	Fish Valley, Upper (CA)	1	7N	22E	8050
19L065	Poison Flat (CA)	25	8N	21E	7900
19L18A5	Wet Meadows Lake (CA)	26	9N	19E	8100
19L20a	Wolf Creek (CA)	35	8N	20E	8000

WALKER RIVER					
19L11	Buckeye Forks (CA)	20	4N	23E	8500
19L10	Buckeye Roughs (CA)	15	4N	23E	7900
19L12	Center Mountain (CA)	4	3N	23E	9400
19L8	Leavitt Meadows (CA)	4	5N	22E	7200
19L175A	Lobdell Lake (CA)	20	7N	24E	9200
19L34	Sawmill Ridge (CA)	17	3N	24E	8750
19L75	Sonora Pass (CA)	1	5N	21E	8800
19M1*	Tioqa Pass (CA)	30	1N	25E	9900
19L13	Virginia Lakes (CA)	5	2N	25E	9500
19L22MS	Virginia Lakes Ridge (CA)	32	2N	25E	9200
19L9	Willow Flat (CA)	21	5N	23E	8250

COLORADO

LOWER COLORADO RIVER					
15N5	Kyle Canyon	27	19S	56E	8200
15N3	Lee Canyon #2	9	19S	56E	9200
15N8	Lee Canyon #3	10	19S	56E	8500
14M1	Mathew Canyon	10	6S	70E	6000
14M2	Pine Canyon	23	6S	69E	6200
15N7	Rainbow Canyon #2	6	20S	57E	8100
15L1	White River #1	31	13N	59E	7400

LEGEND

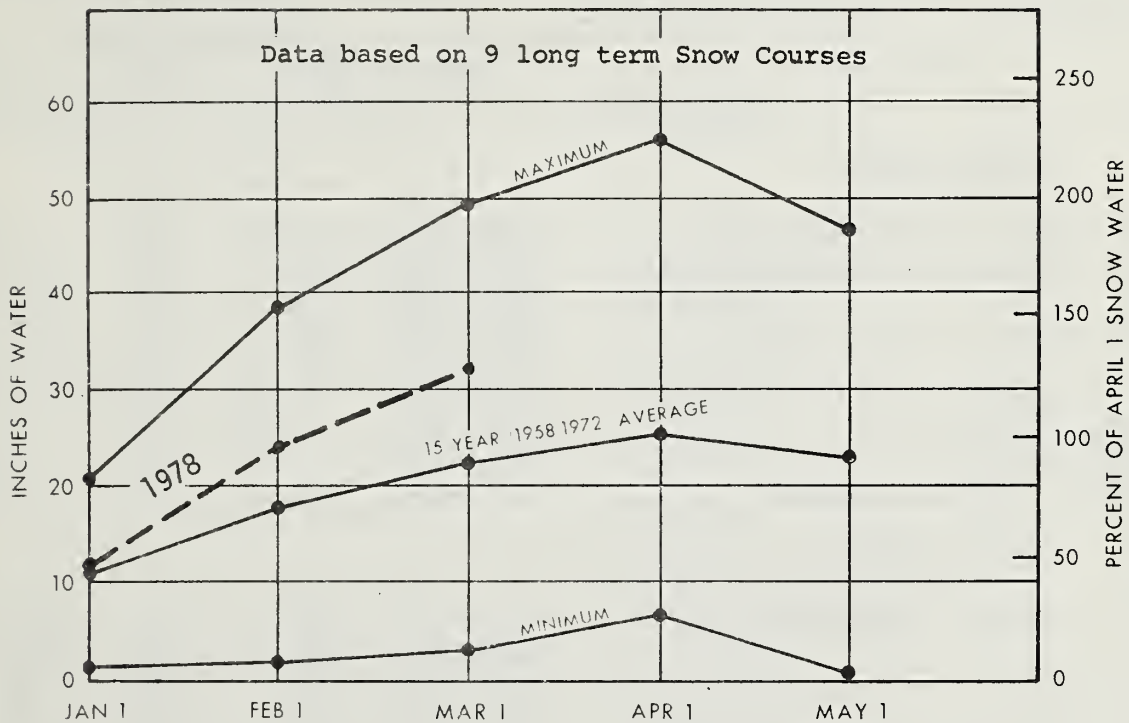
NUMBERING SYSTEM (EXAMPLE)

19K4	Snow Course Only
19K45	Snow Course with SNOTEL
19K4M	Snow Course and Soil Moisture
19K4A	Snow Course and Aerial Marker
19K4P	Snow Course and Storage Precipitation Gage
19K4MA	Snow Course, Soil Moisture and Aerial Marker
19K4MP	Snow Course, Soil Moisture, and Precipitation Gage

Lower case letter "a" indicates no snow course, only an Aerial Marker. SNOTEL has telemetered data for snow pillow, precipitation gage and temperature.

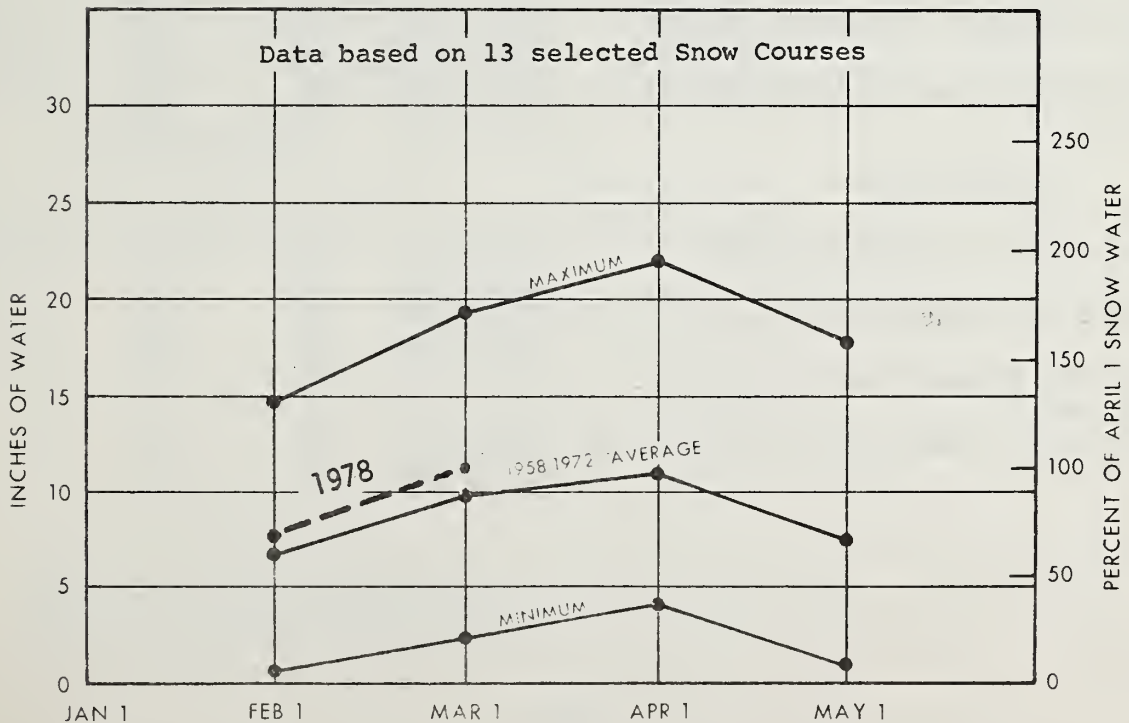
WINTER SNOWPACK

TAHOE, TRUCKEE, CARSON & WALKER BASINS
NEVADA-CALIFORNIA
1978



WINTER SNOWPACK

UPPER HUMBOLDT & SNAKE BASINS
NEVADA
1978



STREAMFLOW FORECASTS (Thousand Acre Feet) as of: March 1, 1978

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum overage 24-hour flow. All overages are for 1958-72 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
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TRUCKEE RIVER

Galena Creek near Steamboat, NV	April-July	5.3	120	4.4
Little Truckee River above Boca, CA	March-April	120	120	100
	April-July	110	124	89
Truckee River at Farad, CA ^{1/} ^{2/}	March-July	380	121	313
	April-July	340	127	267
Lake Tahoe Rise in Feet (assuming gates closed) ^{1/}	March-High	2.08	120	1.74
	April-High	1.85	127	1.46
Sage Hen Creek, CA	April-July	8	127	6.3
Steamboat Creek at Steamboat	April-July	6.4	115	5.6

CARSON RIVER

East Carson near Gardnerville, NV	March-July	285	144	198
	April-July	265	146	182
West Carson at Woodfords, CA	March-July	80	143	56
	April-July	75	144	52
Carson River near Carson City, NV	March-July	295	147	201
	April-July	275	155	178
Carson River near Fort Churchill, NV	March-July	265	146	181
	April-July	245	154	159

WALKER RIVER

Bukeye Creek	April-July	60	176	34
East Walker near Bridgeport, CA ^{3/}	March-Aug.	130	173	75
	April-Aug.	120	176	68
West Walker below Little Walker near Coleville, CA	March-July	230	152	151
	April-July	220	152	145

SNAKE RIVER

Owyhee River near Owyhee, NV ^{4/}	March-July	95	117	81
	April-July	83	122	68
Owyhee River near Gold Creek, NV ^{4/}	March-July	30	130	23
	April-July	25	138	18
South Fork Owyhee River near White Rock, NV	April-July	140	149	94
Salmon Falls Creek near San Jacinto, NV	March-July	89	111	80
	March-Sept.	93	111	

STREAMFLOW FORECASTS (Thousand Acre Feet) as of:

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
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COLORADO RIVER

Virgin River at Littlefield, AZ	April-June	55	116	43
Virgin River at Virgin, UT	April-June	52	108	48

HUMBOLDT RIVER

Lamoille Creek near Lamoille, NV	March-July	32	110	29
	April-July	31	111	28
South Fork Humboldt above Dixie Creek	March-July	78	110	71
	April-July	72	109	66
Marys River above Hot Springs, NV	March-July	50	132	38
	April-July	45	132	34
North Fork Humboldt at Devils Gate, NV	March-July	48	120	40
	April-July	39	122	32
Humboldt River at Palisade, NV	March-July	230	106	218
	April-July	200	104	193
Humboldt River at Comus, NV	March-July	190	111	171
	April-July	165	111	149
Kingston Creek near Austin, NV	April-July	3.7	100	3.7
Little Humboldt Rv. nr Paradise Va., NV	April-July	14	140	10
Martin Creek near Paradise, NV	March-July	27	142	19
Reese River near Ione, NV	April-July	8.4	140	6
Rock Creek nr Battle Mountain, NV	April-July	30	158	19

GREAT NORTHERN BASIN

Bidwell Creek nr Fort Bidwell, CA	April-July	11.3	98	11.5
Mill Creek near Cedarville, CA	April-July	4.4	94	4.7
Deep Creek near Cedarville, CA	April-July	3.3	100	3.3
Eagle Creek near Eagleville, CA	April-July	4.6	107	4.3
Quinn River near McDermitt, NV	April-July	25	147	17
East Fork Quinn Rv. nr McDermitt, NV	April-July	16	134	12

EASTERN NEVADA

Franklin River near Arthur, NV	April-July	7.4	103	7.2
Steptoe Creek near Ely, NV	April-July	2.6	96	2.7

1. Forecast issued by Truckee Basin Water Committee

2. Observed flow plus change in storage in Boca, Stampede, Prosser Reservoir, Donner, Independence and Martis Creek Lakes and minus the flow at Truckee River at Tahoe City, CA.

3. Observed flow plus change in storage in Bridgeport Reservoir

4. Observed flow plus change in storage in Wildhorse Reservoir

+ 1958-1972 period.

RESERVOIR STORAGE (Thousand Acre Feet) AS OF March 1, 1987

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average †
Owyhee	Wild Horse	72	23	45	18
Lower Humboldt	Rye Patch	172	49	108	95
Colorado	Mohave	1,810	1,647	1,671	1,689
Colorado	Mead	27,217	21,169	21,844	17,224
Tahoe	Tahoe	732	69	165	443
Truckee	Boca	41	23	27	11
Truckee	Stampede	220	32	40	**
Truckee	Prosser***	30	0.1	0.1	8*
Carson	Lahontan	291	114	174	204
West Walker	Topaz	59	11	13	40
East Walker	Bridgeport	42	13	13	31

* Adjusted average.
 ** Storage began August 1, 1969.
 *** Flood Control use allocation of 20,000 acre-feet between November 1 and April 10.

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average †
October 1	97	574	718
January 1	124	488	714
February 1	221	509	782
March 1	302	545	843
April 1			893
May 1			934

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.
 TOTAL USABLE CAPACITY

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
East Fork Carson River near Gardnerville, NV	2400 - 2600	1728
Carson River near Carson City, NV	2700 - 2900	1901
Carson River near Fort Churchill, NV	2400 - 2600	1730
W. Walker R. below L. Walker nr Coleville, CA	1950 - 2150	1535

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/ Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
East Carson River near Gardnerville, NV	200	8/5	7/20

† 1958-1972 period.

SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
LAKE TAHOE						
Echo Peak (CA)	7800	2/23/78	106	45.4	5.6	-
Echo Summit (CA)	7450	2/27/78	88	33.9	0.4	29.6
Fallen Leaf (CA)	6300	2/27/78	28	10.6	-	-
Freel Bench (CA)	7300	2/24/78	38	14.9	2.6	12.1*
Glenbrook #2	6900	2/28/78	39	13.2	3.7	10.6
Hagans Meadow (CA)	8000	2/24/78	61	24.4	3.9	16.1
Heavenly Valley	8800	2/23/78	83	33.0	7.6	25.1*
Lake Lucille (CA)	8200	2/23/78	169	66.8	14.4	-
Marlette Lake	8000	2/23/78	75	25.8	5.5	18.6
Richardsons #2 (CA)	6500	2/28/78	52	18.5	4.8	15.6
Rubicon #1 (CA)	8100	2/26/78	135	49.8	10.5	40.0
Rubicon #2 (CA)	7500	2/26/78	89	34.2	5.6	24.8*
Tahoe City Cross (CA)	6750	2/27/78	58	23.0	6.8	-
Upper Truckee (CA)	6400	2/24/78	34	12.5	2.4	10.1
Ward Creek #2 (CA)	7000	2/23/78	114	45.7	9.6	35.1
Ward Creek #3 (CA)	6750	2/23/78	107	41.9	11.6	-
TRUCKEE RIVER						
Boca #2 (CA)	5900	2/26/78	20	7.2	1.9	6.2
Brockway Summit (CA)	7100	2/27/78	60	24.7	4.2	17.5*
Castle Creek (CA)	7400	2/28/78	137	58.8	11.8	43.4*
Donner Park #2 (CA)	6000	2/26/78	49	18.1	5.3	15.8*
Donner Summit (CA)	6900	2/21/78	127	51.7	8.2	32.5
Fordyce Lake (CA)	6500	2/23/78	122	52.2	9.7	31.5*
Furnace Flat (CA)	6700	2/23/78	140	59.3	12.3	36.1*
Independence Camp (CA)	7000	2/23/78	76	29.1	5.6	19.6
Independence Creek (CA)	6500	2/23/78	53	18.8	2.9	12.2*
Independence Lake (CA)	8450	2/23/78	125	49.4	9.1	35.6
Little Valley	6300	2/24/78	32	11.1	3.0	8.5*
Mount Rose	9000	2/23/78	98	41.4	7.9	-
Mount Rose Ski Area	8850	2/28/78	128	53.7	10.0	-
Sage Hen Creek (CA)	6500	2/23/78	66	24.4	4.2	16.4
Squaw Valley #2 (CA)	7500	2/23/78	144	58.0	12.9	43.2
Truckee #2 (CA)	6400	2/27/78	46	16.5	3.6	13.9*
Webber Lake (CA)	7000	NS	-	-	-	-
Webber Peak (CA)	8000	NS	-	-	-	-
CARSON RIVER						
Blue Lakes (CA)	8000	2/20/78	147	55.9a	11.0a	-
Carson Pass, Upper (CA)	8600	2/21/78	105	40.1	6.3	31.1
Clear Creek	7300	2/24/78	43	14.6	3.1	11.9
Ebbetts Pass AM (CA)	8700	2/24/78	114	38.18a	10.0a	26.6*
Ebbetts Pass #2 (CA)	8700	2/24/78	144	47.3	8.8	-
Fish Valley, Upper (CA)	8050	2/24/78	48	16.8a	2.9	13.1*
Poison Flat (CA)	7900	2/24/78	62	22.3	5.1	13.9*
Wet Meadows Lake AM (CA)	8050	2/24/78	82	30.0a	5.9a	23.0*
Wet Meadows #2 (CA)	8050	2/24/78	132	45.3	9.7	-
Wolf Creek AM (CA)	8000	2/24/78	96	33.6a	7.3a	27.2*

† 1958-1972 period.

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †

WALKER RIVER

Buckeye Roughs (CA)	7900	2/27/78	61	24.3	2.7	-
Center Mountain (CA)	9400	2/24/78	127	48.4	7.8	33.9
Leavitt Meadow (CA)	7200	2/24/78	57	17.4	2.0	-
Lobdell Lake (CA)	9200	2/24/78	68	23.5	2.2	14.4*
Sawmill Ridge (CA)	8750	2/24/78	84	31.7	4.2	-
Sonora Pass (CA)	8800	2/24/78	88	33.4	5.3	21.5
Tioga Pass (CA)	9900	2/23/78	118	47.2	7.6	-
Virginia Lakes (CA)	9500	2/24/78	72	27.1	5.4	15.5
Virginia Lakes Ridge (CA)	9200	2/24/78	75	26.8	5.0	-
Willow Flat (CA)	8250	2/24/78	48	15.9	2.5	-

NORTHERN GREAT BASIN

Bald Mountain AM	6720	2/22/78	14	4.6a	0.4a	3.4
Barber Creek (CA)	6500	2/23/78	32	11.7	2.0	10.0
Cedar Pass (CA)	7100	2/22/78	34	12.1	3.0	13.1
Denio Creek AM (OR)	6000	2/28/78	3	0.9a	0.1a	0.5*
Disaster Peak	6500	2/28/78	42	15.9	1.8e	13.4
Dismal Swamp AM (CA)	7000	2/22/78	60	22.2a	3.0a	14.1*
Eagle Peak (CA)	7200	NS	-	-	-	-
49 Mountain	6000	2/27/78	20	7.1	1.5	3.7
Hays Canyon	6400	2/23/78	22	7.1	0.6	3.2
Little Bally Mountain AM	6000	2/22/78	19	6.3a	0.6a	2.3*
Mount Bidwell	7240	2/24/78	63	23.3	3.4	-
North Star	6200	2/23/78	43	16.0	3.9	-
Oregon Canyon AM (OR)	7240	2/28/78	18	5.0a	0.4a	4.8*
Quinn Ridge AM	6300	2/28/78	12	3.4a	0.1a	1.8*
Reservation Creek (CA)	5900	2/27/78	31	11.3	3.0	9.4
Trout Creek AM (OR)	7800	2/28/78	36	13.3a	2.4a	6.4*

SNAKE RIVER

Bear Creek	7800	2/26/78	60	20.7	8.6	17.3
Fox Creek	6800	2/26/78	38	10.7	4.8	9.0
Goat Creek	8800	2/26/78	53	17.6	6.0	16.0
Hummingbird Springs	8945	2/26/78	68	22.8	7.0	19.4
Merritt Mountain AM	7000	2/23/78	18	5.2a	2.0a	5.8*
Pole Creek Ranger Station	8330	2/26/78	51	16.3	7.9	16.8
Red Point AM	7940	NS	-	-	-	9.1
76 Creek	7100	2/26/78	40	13.4	4.3	10.0
Stag Mountain AM	7700	2/23/78	22	6.4a	0.8a	5.0*

M7-OL-220255

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †

OWYHEE RIVER

Big Bend	6700	2/28/78	33	9.5	0.8	7.6
Columbia Basin AM	6650	2/23/78	48	13.4a	0.8a	8.1*
Fawn Creek AM	7000	2/28/78	23	7.5	1.1a	4.4*
Gold Creek	6600	2/27/78	20	5.8	0.7	4.9
Jack Creek, Lower	6800	2/27/78	14	4.3	0.5	4.1
Jack Creek, Upper	7250	2/27/78	27	7.9	2.2	7.7
Jacks Peak	8420	2/27/78	63	20.4	6.2	19.9
Laurel Draw	6700	2/28/78	29	8.1	2.1	6.4
Louse Canyon AM (OR)	6440	2/28/78	28	8.4a	0.3	2.8*
Taylor Canyon	6200	2/28/78	23	6.7	0.6	4.1

UPPER HUMBOLDT RIVER

American Beauty AM	7800	2/23/78	33	10.9a	1.3a	8.3*
Corral Canyon	8500	2/23/78	50	15.0	3.8	12.9
Dorsey Basin	8100	2/23/78	38	11.6	3.6	10.3
Dry Creek	6500	2/23/78	23	6.2	0.6	2.6
Fry Canyon	6700	2/27/78	26	7.1	0.8	6.3
Green Mountain	8000	2/23/78	38	12.8	3.2	11.2
Harrison Pass #1	6600	2/23/78	21	6.3	0.5	3.7*
Harrison Pass #2	7400	2/23/78	26	6.5	0.7	5.4*
Lamoille #1	7100	2/22/78	26	7.4	2.3	8.2
Lamoille #3	7700	2/23/78	37	11.6	3.2	9.9
Lamoille #5	8700	2/22/78	71	24.8	5.6	22.0
Pole Canyon	7700	2/23/78	44	13.2	3.1	-
Robinson Lake AM	9200	2/23/78	96	29.7a	0.3a	22.1*
Rodeo Flat	6800	2/27/78	23	6.1	0.7	4.9
Ryan Ranch	5800	NS	-	-	0.1	0.9*
Smith Creek	7700	2/23/78	41	12.7	3.2	-
Tent Mountain AM	7000	2/23/78	26	7.5a	0.1a	-
Tent Mountain AM	8350	2/23/78	61	18.3a	-	-
Tremewan Ranch	5700	2/27/78	13	3.8	0.4	1.2
Trout Creek, Lower	6900	2/23/78	20	5.5	1.2	3.1
Trout Creek, Upper	8500	2/22/78	53	17.5	4.5	16.1

LOWER HUMBOLDT RIVER

Big Creek Campground	6600	2/24/78	11	3.4	0.6	1.1
Big Creek Mine	7600	2/24/78	22	6.1	1.9	4.0
Big Creek Summit	8700	2/24/78	42	12.3	-	-
Big Creek, Upper	7800	2/24/78	26	7.0	2.7	5.1
Buckskin, Lower	6700	2/28/78	28	8.2	0.7	7.4
Buckskin, Upper	8200	2/28/78	32	10.2	0.4	8.7
Golconda #2	6000	2/28/78	18	5.5	1.7	3.9*
Granite Peak	7800	2/28/78	56	19.9	3.5	13.2
Lamance Creek	6000	2/28/78	31	10.2	2.0e	9.4
Martin Creek	6700	2/28/78	37	11.8	2.3	8.9
Midas	7200	2/28/78	32	10.4	0.1a	3.3
Toe Jam AM	7700	2/23/78	34	9.7	0.1a	7.9*

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †

EASTERN NEVADA

Baker #1	7950	2/27/78	26	6.5	1.0	5.7
Baker #2	8950	2/27/78	44	12.7	2.5	11.9
Baker #3 AM	9250	2/24/78	50	14.5	3.5a	13.0
Berry Creek	9100	2/21/78	41	10.8	5.3e	11.5
Bird Creek	7500	2/21/78	18	3.2	0.1	3.5
Hole-in-Mountain	7900	2/22/78	42	16.3	3.1	19.3
Kalamazoo Creek	7400	2/26/78	28	8.0	2.6	6.1
Mount Defiance AM	9400	2/24/78	54	15.0	3.6a	-
Murray Summit	7250	2/23/78	20	4.7	0.0	2.8
Robinson Summit	7600	2/23/78	16	3.8	0.1	1.9
Silver Creek #2 AM	8000	2/24/78	30	8.0	2.2a	4.7
Ward Mountain #2 AM	7400	2/24/78	38	10.3	2.2a	8.2
White River #1	7400	NS	-	-	0.0	2.5*

CENTRAL GREAT BASIN

Campito Mountain (CA)	10200	NS	-	-	1.0	4.9*
Chiatovich Flat AM	10500	NS	-	-	0.0	3.2*
Clark Canyon	9000	3/2/78	56	15.7	0.6	7.3
Montgomery Pass	7100	2/27/78	15	5.1	0.0	1.3*
Pinchot Creek AM	9300	NS	-	-	0.0	0.9*
Piute Pass AM	11700	NS	-	-	0.0	4.7*
Trough Springs	8500	NS	-	-	1.0	5.0*

LOWER COLORADO RIVER

Kyle Canyon	8200	3/1/78	65	20.8	1.5	9.6
Lee Canyon #2	9000	3/3/78	73	21.9	1.5	9.0
Lee Canyon #3	8500	3/3/78	58	17.5	1.0	7.5*
Mathew Canyon	6000	2/27/78	1	0.4	0.0	4.4
Pine Canyon	6200	2/27/78	5	2.1	0.0	6.3
Rainbow Canyon #2	8100	3/1/78	80	26.4	3.4	13.1*

ADDITIONAL MEASUREMENTS

Echo Peak (CA)	7800	2/4/78	105	35.7	-	-
Mount Rose	9000	2/4/78	65	26.6	-	-
Independence Lake (CA)	8450	2/15/78	137	48.3	-	-
Independence Creek (CA)	6500	2/15/78	58	18.4	-	-
Mount Rose Ski Area	8850	2/15/78	143	51.0	-	-

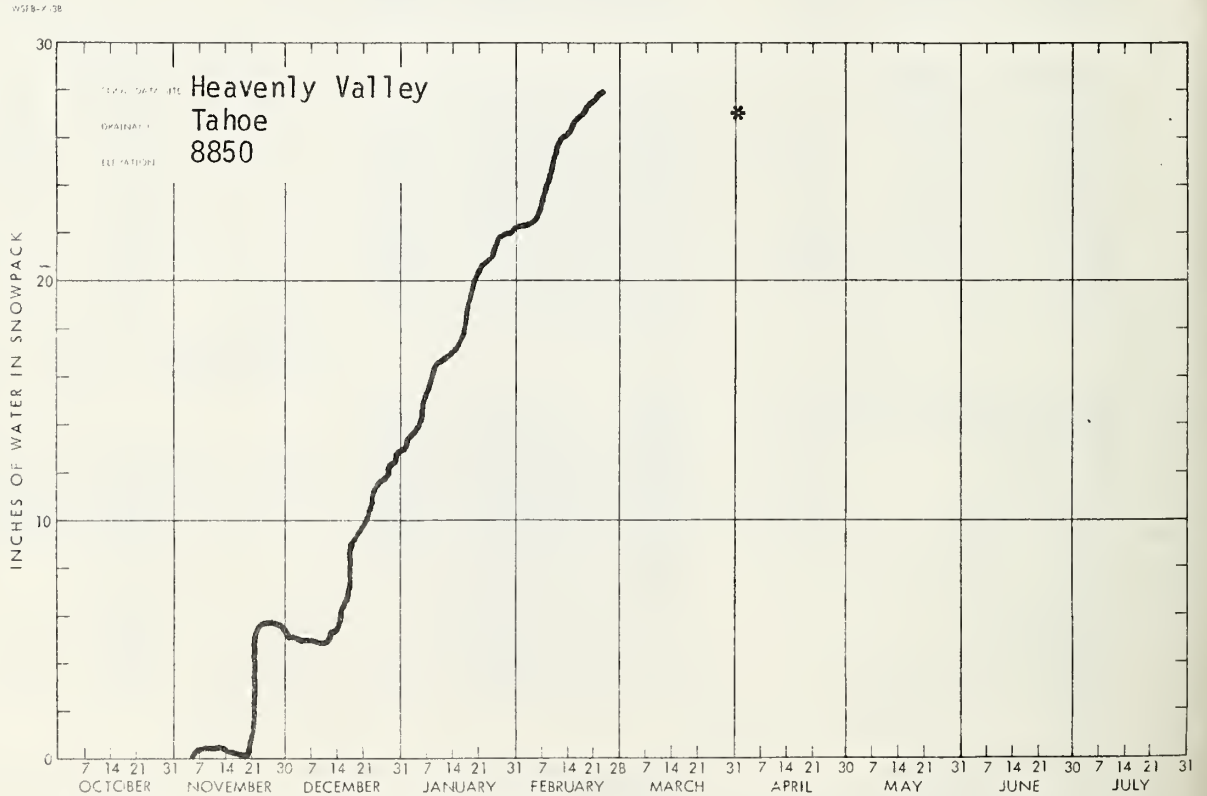
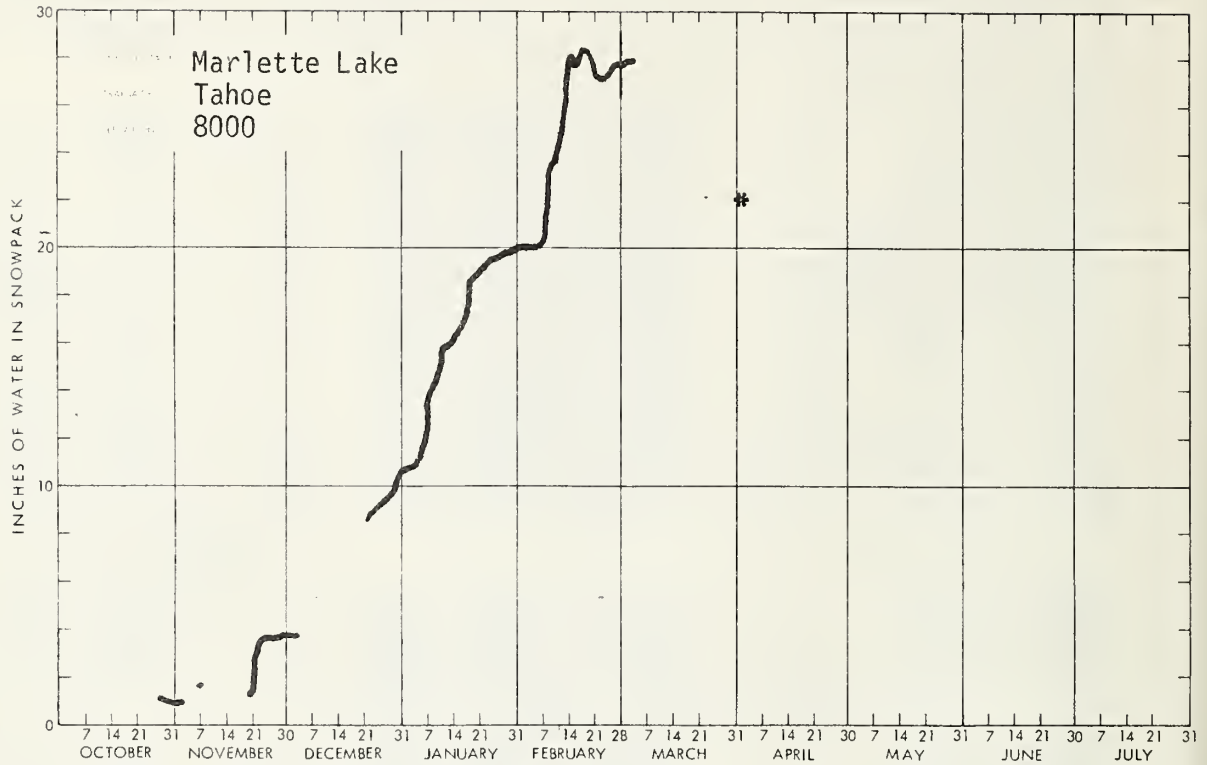
NS No survey
e Estimate

NOTE:
All averages based on 1958-72, 15 year period. Forecast period is April 1 through July 31 unless otherwise noted.
a-Aerial marker; water content estimated. * 1958-72 adjusted average.

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	Percent of Average
<u>LAKE TAHOE-TRUCKEE</u>							
Echo Peak	7800	2/23/78	6.0	4.4	35.7	12.1	-
Fallen Leaf	6300	2/27/78	4.0	2.5	25.0	6.8	-
Hagans Meadow	8000	2/24/78	5.6	2.9	26.6	7.9	-
Heavenly Valley	8800	2/23/78	5.9	26.2	-	-	-
Independence Camp	7000	2/23/78	6.4	2.8	29.4	7.1	-
Independence Creek	6500	2/23/78	6.7	3.1	29.5	9.9	-
Independence Lake	8450	-	-	3.0	-	12.7	-
Marlette Lake	8000	2/23/78	5.6	-	28.5	-	-
Mount Rose	9000	2/23/78	4.9	2.4	21.9	5.8	-
Rubicon #2	7500	2/26/78	-	-	34.0	-	-
Tahoe City Cross	6750	2/27/78	4.7	3.0	23.7	8.8	-
Truckee #2	6400	2/27/78	5.9	2.6	14.5	6.0	-
Ward Creek #3	6750	2/23/78	9.0	4.8	47.0	16.3	-
<u>CARSON RIVER</u>							
Ebbetts Pass	8750	2/24/78	8.9	3.5	34.2	11.8	-
Poison Flat	7900	2/24/78	6.0	0.2	23.4	3.0	-
Wet Meadows	8050	2/24/78	8.2	2.3	24.8	8.7	-
<u>WALKER RIVER</u>							
Lobdell Lake	9200	2/24/78	6.1	1.5	23.7	3.5	-
Sonora Pass	8800	2/24/78	8.3	2.5	28.9	11.5	-
Virginia Lakes Ridge	9200	2/24/78	7.9	2.3	27.4	15.7	-
<u>HUMBOLDT RIVER</u>							
Corral Canyon	2500	2/23/78	-	-	13.2	6.3	-
Dorsey Basin	8100	2/23/78	5.2	1.3	16.6	6.8	115
Green Mountain	8000	2/23/78	-	-	13.3	7.6	125
Lamance Creek	6000	2/28/78	-	-	19.0	-	-
Lamoille #3	7700	2/23/78	4.1	1.5	15.2	6.8	-
Midas (Since 3/30/77)	7200	2/28/78	-	-	21.1	-	-
Rodeo Flat	6800	2/27/78	1.0	0.5	13.0	5.0	123
Trout Creek, Lower	6900	2/22/78	-	3.8	7.5	3.8	71
<u>SNAKE-OWYHEE RIVER</u>							
Bear Creek	7800	2/26/78	-	-	16.0	-	-
Big Bend	6700	2/28/78	1.5	0.3	9.6	8.7	94
Goat Creek	8800	2/26/78	5.8	5.3	19.0	10.1	-
Jacks Peak	8420	2/27/78	5.0	1.3	19.0	15.8	-
Laurel Draw	6700	2/28/78	3.8	-	-	-	-
Pole Creek RS	8330	2/26/78	-	-	13.0	-	-
76 Creek	7100	2/26/78	-	-	10.8	4.3	-
Taylor Canyon	6200	2/28/78	1.5	2.0	6.8	8.0	-
Upper Jack Creek	7250	2/27/78	4.3	1.3	13.5	13.5	-
<u>EASTERN NEVADA</u>							
Berry Creek	9100	2/21/78	7.0	-	11.2	-	-
<u>NORTHERN GREAT BASIN</u>							
Cedar Pass	7100	2/22/78	2.1	-	16.4	-	-
Disaster Peak	6500	2/28/78	-	-	14.7	-	-

SNOW PILLOW MEASUREMENTS



* April 1 Average

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

- Agricultural Research Service
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- Geological Survey
- Navy
- Soil Conservation Service
- U. S. District Court - Federal Water Master
- NOAA, National Weather Service

STATE

- California Cooperative Snow Surveys
- California Department of Parks and Recreation
- California Department of Water Resources
- Colorado River Commission of Nevada
- Idaho Cooperative Snow Surveys
- Nevada Association of Conservation Districts
- Nevada Department of Conservation & Natural Resources
 - Division of Water Resources
 - Nevada State Forester
- Oregon Cooperative Snow Surveys
- Utah Cooperative Snow Surveys
- White Mountain Research Station, Univ. of California

PRIVATE

- Amalgamated Sugar Company
- Kennecott Copper Corporation
- Nevada Irrigation District
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Pacific Gas and Electric Company
- Pershing County Water Conservation District
- Sierra Pacific Power Company
- Truckee-Carson Irrigation District
- Walker River Irrigation District
- Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

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*"The Conservation of Water begins
with the Snow Survey"*

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